of the grasses. A second volume has now appeared, bearing the date 1904 on the title page, but with a preface dated April 1, 1905. It is also the joint work of several authors, namely, Professor Pammel, C. R. Bell and F. Lamson-Scribner, the two latter of the United States Department of Agriculture. This volume is almost entirely systematic, including descriptions (and usually figures) of about two hundred species and varieties that are native to Iowa or are grown more or less commonly under cultivation. Short chapters on the physiography and geology of Iowa by Dr. H. F. Bain, and the ecological and geographical distribution of Iowa grasses, by Professor Pammel, and a bibliography, close the volume. The two volumes must prove of great value to the farmers of the state, and the second one especially must be helpful to students and others who are interested in the grasses.

It is unfortunate that the public printer should not have done better by these volumes. Paper, type, proof-reading and binding are poor, and are quite unworthy of the text. The authors as well as the people of the great state of Iowa have a right to something much better.

EXPERIMENTS WITH PLANTS.

YEAR by year, one can see that progress is made in the study of plants and their activities. Instead of learning the systematic classification of a plant, alone, as we used to a generation ago, or making out only its microscopic mechanism, as we did later, we are now shown how we may find out what plants and their different organs are doing at different times in their lives. In a suggestive book, 'Experiments with Plants,' Professor Dr. Osterhout, of the University of California, shows teachers how they may ask many questions of plants in such a way as to have them answered by the plants themselves. In ten chapters, the author takes up as many different subjects as follows: the awakening of the seed, getting established, the work of roots, the work of leaves, the work of stems, the work of flowers, the work of fruits, how plants are influenced by their surroundings, plants which cause decay, fermentation and disease, and making new kinds of plants. By a series of simple experiments, usually with simple and often home-made apparatus, the author enables the student to find out a great many things about plants. More than two hundred and fifty illustrations, make still plainer the very clear directions given for making the experiments, and in both, there is evidence of the author's ingenuity in planning devices for experimental purposes.

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INTERNATIONAL EXPLORATION OF THE NORTH SEA.[1]

IT would be difficult to estimate in terms sufficiently emphatic the vast, momentous importance which attaches to the great international investigations at present being carried out in regard to the fisheries of the North Sea and adjacent waters. At a conference of delegates held at Stockholm in 1890 (at the instance of the King of Sweden and Norway) a general plan for instituting inquiries was drawn up, which it was confidently asserted would undoubtedly lead to the attainment of a better and much more extended knowledge of the natural history of fishes and the influences which regulate their movements to and fro. At a second conference held at Christiania in 1901 a program of work was formulated, to which the several governments acceded, and in the summer of 1902 operations for the great international scheme—the exploration of the sea—were begun.

The nations engaged in the investigations conjointly with Great Britain, include Belgium, Denmark, Finland, Germany, Holland, Norway, Sweden and Russia. Each country, we are told, sends representatives to a central council, which is located in Copenhagen under the presidency of Dr. Walter Herwig, of Hanover, and the vice-presidency of Professor Otto Pettersson, of Stockholm. Every endeavor has been made to ensure that the investigations are carried out in as thorough a manner as possible. The ground of inquiry extends over a very extended sea area, and involves the elucidation and confirmation regarding various points connected with the

[1] The London *Times*.

phenomena of the sea, of which at present we possess a somewhat limited knowledge.

In carrying on the manifold and intricate investigations regarding the hydrographical and fish-yielding mysteries of the sea each country has its own laboratories and scientific staff, and has also at command one or more steamers. In some cases a hired vessel for temporary use is employed (Great Britain has to be content with one); but in others, as in Germany, Russia, Norway, Sweden and Denmark, special steamers have been built, provided with accommodation for a large scientific staff, and elaborately equipped with scientific appliances and fishing gear. At the central laboratory at Christiania, under the direction of Professor Fridtjof Nansen, the hydrographic apparatus required by the different countries is regulated and distributed. The chemical analyses are checked and controlled, and various hydrographical researches of a special and difficult kind are undertaken.

GREEK AT CAMBRIDGE.

The chairman and secretaries of the committee in support of the recommendations of the studies and examinations syndicate making Greek optional in the entrance examination at Cambridge have addressed the following letter to the editor of the London *Times:*

Of the Graces submitted to the senate of the University of Cambridge on March 2, 3 and 4 last, for the confirmation of the report of the Studies Syndicate, Grace 2 was the most important and the most eagerly contested. It was this Grace which directly proposed to make Greek optional in the previous examination.

The number of members of the electoral roll who are members of the senate—that is, practically, the resident members of the senate—was about 600. In the whole constituency there were about 7,000 voters. The votes were—placet 1,055, non-placet 1,557.

A careful analysis of the poll-book gives the following results:

1. Of the residents, 288 voted in favor of the recommendation that Greek should no longer be compulsory in the previous examination; 240 voted against the recommendation—majority of residents in favor of the recommendation, 48.

2. Of the total number of members of the senate who voted, residents and non-residents included, 1,591 were laymen, 1,021 were clergymen.

Of the laymen, 923 voted in favor of the recommendation; 668 voted against it—majority of laymen in favor of the recommendation, 255.

Of the clergymen, 132 voted in favor of the recommendation; 889 voted against it—majority of clergymen against the recommendation, 757.

THE AMERICAN PSYCHOLOGICAL ASSOCIATION.

According to the preliminary announcement issued by the secretary of the American Psychological Association, Professor Wm. Harper Davis, of Lehigh University, the fourteenth annual meeting will be held at Harvard University on December 27, 28 and 29, in affiliation with the American Philosophical Association.

After the formal opening of Emerson Hall, where the associations will meet in joint session on the afternoon of Wednesday, December 27, to hear addresses by President Eliot and Dr. E. Emerson, a formal joint discussion will be held 'On the Affiliation of Psychology with Philosophy and with the Natural Sciences.' Professor Fullerton, President Hall, Professor Münsterberg, Professor Taylor, Professor Thilly and Professor Witmer have consented to speak.

A conference of the association has also been arranged to consider the subject of 'Co-operation between Laboratories and Departments of Different Institutions.' This will also be thrown open for general discussion. It is possible that another discussion, either on a strictly psychological subject or on the content of undergraduate instruction in psychology, will be arranged for.

Luncheon will be served on Wednesday, December 27, by the Harvard Corporation. After the address of the president, Professor Mary Whiton Calkins, of Wellesley College, on Wednesday evening, a general reception will be held at the residence of Professor and Mrs. Münsterberg, and following the presidential address before the American Philosophical Association, by Professor John Dewey, of Columbia University, a joint smoker will be held in the Harvard Union.